

---

# Public Health Reports

VOLUME 65

MARCH 3, 1950

NUMBER 9

---

TUBERCULOSIS CONTROL ISSUE NO. 49

## IN THIS ISSUE

Editorial—An End to Lip Service  
Tuberculosis Control in Philadelphia  
Social Services for the Tuberculous, I



FEDERAL SECURITY AGENCY

---

PUBLIC HEALTH SERVICE

# FEDERAL SECURITY AGENCY

*Oscar R. Ewing, Administrator*

## PUBLIC HEALTH SERVICE

*Leonard A. Scheele, Surgeon General*

**Division of Public Health Methods**

*G. St. J. Perrott, Chief of Division*

### CONTENTS

	Page
Editorial—An end to lip service. Robt. J. Anderson.....	267
Study of tuberculosis control in Philadelphia. Introduction. Russell E. Teague.....	269
Social services for the tuberculous and their families, I. Ruth B. Taylor..	279
<b>INCIDENCE OF DISEASE</b>	
United States:	
Reports from States for week ended February 11, 1950.....	307
Territories and possessions:	
Virgin Islands—Notifiable diseases—October–December 1949...	310
Foreign reports:	
Canada—Provinces—Notifiable diseases—Week ended January 21, 1950.....	310
Chile—Santiago—Poliomyelitis.....	311
Finland—Notifiable diseases—November 1949.....	311
Madagascar—Notifiable diseases—December 1949.....	311
New Zealand—Notifiable diseases—5 weeks ended December 31, 1949..	312
Norway—Notifiable diseases—November 1949.....	312
Reports of cholera, plague, smallpox, typhus fever, and yellow fever received during the current week—	
Plague.....	312
Smallpox.....	312
Typhus fever.....	312
Deaths during week ended February 11, 1950.....	313

# Public Health Reports

Vol. 65

MARCH 3, 1950

No. 9

## — Editorial —

### An End to Lip Service

In the past, many communities have examined themselves for countless reasons. Some have attempted to learn whether adequate services are being provided for a single group such as children or unmarried mothers or new citizens. Others have explored their medical or recreation or school facilities. Still others have gone so far as to review the entire health or welfare structure of the community.

In November of 1948, a special study was undertaken in Philadelphia to determine how medical, nursing, and social services available to the people of that city contribute to the control of tuberculosis. The study was undertaken by three professional workers—a physician, a nurse, and a medical social worker—all working toward a common objective and with a singleness of purpose. Despite three very distinct approaches their findings were integrated into a single study from which the health authorities of Philadelphia hope to learn a great deal about the organization and effectiveness of tuberculosis control in that community.

One phase of this study—the place of social services in the over-all program of tuberculosis control—is of especial interest. Such a study is unique, and, we believe, almost without precedent. The object here was to determine the significance of the city's social service activities to the health program. The emphasis actually is upon their impact on a health problem. That health and social agencies should together contribute to the welfare of the citizen at whom the efforts of both are directed would seem more than obvious. But, are these efforts so organized, and so employed that the potential recipient does indeed gain maximum benefit?

For years we have given lip service to "social factors" in tuberculosis. It is time to assign this lip service to history and move ahead.

This is the forty-ninth of a series of special issues of PUBLIC HEALTH REPORTS devoted exclusively to tuberculosis control, which appear in the first week of each month. The series began with the Mar. 1, 1946, issue. The articles in these special issues are reprinted as extracts from the PUBLIC HEALTH REPORTS. Effective with the July 5, 1946, issue, these extracts may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., for 10 cents a single copy. Subscriptions are obtainable at \$1.00 per year; \$1.25 foreign.

It is time to inquire, as did the people of Philadelphia: How is the effectiveness of the tuberculosis program influenced by social services?

The manner in which any community sets about to find answers to these basic questions, as well as the answers themselves, is, of course, of interest and value to other localities concerned with effective tuberculosis control. Therefore, because we feel that much can be learned from such an experience, we are presenting in this issue the study of Philadelphia's social service activities which relate to tuberculosis patients and their families. The specific details about the 43 hospitals, clinics, social agencies, and rehabilitation agencies who participated in the study have been reported to those agencies and are not published here. The significance of this presentation lies in its demonstration of how a community attempts to determine whether it is meeting the social needs of a group with a specific health problem—in this instance the group affected by tuberculosis. The Social Service Section in this issue is only one part of this community review; the Medical and Nursing Sections will be published in the future.

The publication of this material has been approved by the official and voluntary agencies which provided the information for the report. They are thus making a contribution not only to their own community but also to other areas with a similar complexity of health and social agencies and similar problems in tuberculosis control. Such an attitude on the part of the Philadelphia health and social agency personnel bespeaks their courage and far-sightedness. The Division has been pleased to be associated with this project and with the people of Philadelphia who made this study possible.

ROBT. J. ANDERSON, *Medical Director,*  
*Chief, Division of Tuberculosis.*



# Study of Tuberculosis Control in Philadelphia

## Introduction

By RUSSELL E. TEAGUE, M. D., M. P. H.\*

Leaders in tuberculosis control in the City of Philadelphia have been concerned for some time about the increasing number of tuberculosis patients on the waiting list for admission to hospitals. Early in 1948, the Philadelphia County Medical Society and the Department of Public Health requested the United States Public Health Service to make a survey of the tuberculosis control facilities and activities in the city.

The survey was designed to include all hospitals having beds for the care of tuberculous patients. It also included representative tuberculosis clinics of both public and private agencies and all public health agencies offering tuberculosis nursing service to patients in the Philadelphia area. Medical social services in these settings and the social services offered through public and private social agencies were studied.

### *The City*

Philadelphia is one of the oldest cities in the Nation and is a large industrial center. There are about 2 million people living in an area of 130 square miles. About 85 percent of the people are white and 15 percent are nonwhite; the population is almost equally divided by sex. Late in 1948 and early in 1949, when the material for this report was being gathered, employment conditions in general in Philadelphia were good, but as elsewhere in the Nation, unemployment was rising. As in most municipalities at this time, housing presented one of the most severe problems both in terms of adequacy and standards, a fact of which all Philadelphians are very much aware and a situation which they are working hard to correct. The city itself, large, complex and heavily industrial, may well be typical of many other large industrial centers.

### *The Extent of the Problem*

The best available index of the tuberculosis problem in Philadelphia is the mortality rate. There has been a consistent gradual decline in

\*Senior Surgeon, Division of Tuberculosis, Public Health Service. Tuberculosis Consultant for Federal Security Agency regional offices 1 and 2 and Assistant Director of Henry Phipps Institute, University of Pennsylvania, Philadelphia.

tuberculosis mortality since 1870, when the rate was 341.7 per 100,000 population, to 1948 when it was 44 per 100,000 population. The actual number of deaths was highest in 1918 when 3,763 deaths occurred, and lowest in 1948 with 907 deaths. The death rate declined from 49.1 per 100,000 inhabitants in 1947 to 44 per 100,000 in 1948. There has been a 25 percent reduction in the tuberculosis death rate during the last 10 years. In 1948, 12.5 percent of all deaths from tuberculosis were extra-pulmonary. Tuberculous meningitis was responsible for 31 deaths, miliary tuberculosis for 30, caseous tuberculosis for 13, other types for 26 deaths.

Although the 907 deaths from tuberculosis in 1948 were far fewer than the 3,763 of 1918, this number of deaths plus the fact that nearly 3,000 new cases were reported, indicates a problem of great magnitude. Moreover, among Philadelphians who died locally from tuberculosis an average of 37 percent were never reported as living cases. In 1948 alone, more than 300 of the tuberculosis deaths of Philadelphians in the city were never reported to the health department while they were alive. This is approximately 5 to 10 percent higher than the average for other areas for which this information is available; and indicates a need for more effective case finding and reporting. All told, the central registry of the Division of Tuberculosis of the health department has records on approximately 13,000 cases, almost 8,000 of which are active or questionably active.

A third index of the tuberculosis problem in Philadelphia is the rate at which susceptible individuals are being infected with the tubercle bacillus (incidence of infection). A few comparative studies are available that indicate a marked drop in tuberculin sensitivity in children. In 1928, a tuberculin test survey among school children showed that 25.0 percent of the children 6 years of age and 52.7 at age 16 were positive to the first dose of tuberculin (0.01 mgm. O. T.). In 1948, 20 years later, 4.2 percent of the children entering school at the age of 6 and 16.4 percent at age 16 years were found to be positive to an equivalent dose (0.00002 mgm. PPD). These studies indicate that there has been a marked drop in the incidence of tuberculous infection in children in the past 20 years.

The fourth index of tuberculosis in Philadelphia is the actual prevalence of the disease as found from X-ray surveys of large groups of the population. In the 5-year period, 1943-48, over 400,000 individuals of all ages were surveyed with mass radiographic methods. An analysis of all groups indicates that approximately 1.7 percent of the adult population examined had significant tuberculous lesions of the chest, and 0.4 percent had active tuberculosis. The prevalence of tuberculosis varies with the group being X-rayed. The prevalence in industrial groups was somewhat higher, 2.7 percent, and among food handlers was higher still, 3.1 percent. In one special study, persons

with diabetes were found to have a much higher rate of prevalence. (8.4 percent in diabetics against 4.2 percent in a nondiabetic group with similar age, sex, and race distribution.)<sup>1</sup>

It can be seen, then, that a problem of such magnitude demands solution, and many agencies in Philadelphia, both public and private, have worked successfully for many years to bring about the decline from 3,100 deaths in 1900 to 907 tuberculosis deaths in 1948.

What facilities for bringing about this much control have been operating in Philadelphia?

## Medical Resources

### *Health Department*

The Division of Tuberculosis in the city health department, with a part-time tuberculosis control officer, is officially responsible for tuberculosis control in Philadelphia. The Division was started in 1923 and has gradually expanded. The budget for its program stems from the city and Federal Government. Of the total of \$384,361.52, the United States Public Health Service provides \$170,000.

The Division is the biggest single tuberculosis resource in Philadelphia. Its work is supplemented by the work of the Philadelphia Tuberculosis Association, the private hospitals and clinics and the private physicians. Supported by all the facilities in the city, the Division of Tuberculosis through its clinics, case-finding program, and supervision of cases attempts to insure that all cases of tuberculosis in Philadelphia are found, diagnosed, and placed under medical treatment.

### *Clinics*

The Division of Tuberculosis operates 12 clinics in different parts of the city. These are staffed by chest physicians working on a part-time basis. Two clinic physicians (part time) also supervise care of tuberculosis patients at the Philadelphia Hospital for Contagious Diseases, and one clinic physician is assigned to the tuberculous inmates at Holmsburg Prison.

The clinics provide X-ray, complete physical examination, and laboratory service for the diagnosis of tuberculosis. They also provide collapse therapy and assist patients in being admitted to hospitals and sanatoriums. The quarters of the clinics include a waiting room for patients, a room for nurses, and adequate examining rooms. There are filing cabinets for records, washbasins, toilets for men and women, and medical equipment and supplies. These are the minimum quarters; some of the clinics are much larger.

All clinics are open at least 4 hours a week. Records are kept of

<sup>1</sup> Tuberculosis Among Diabetics—1949. Katherine R. Boucot et al. To be published.

each patient and reports are sent to the Division of Tuberculosis, the Association of Tuberculosis Clinics, and the Social Service Exchange. The large number of persons found in mass photofluorographic surveys who have pulmonary abnormalities has placed an additional burden on the city chest clinics. Occasionally, immediate hospitalization is arranged for patients found in these surveys who have advanced tuberculosis. In the majority of instances, painstaking clinical, bacteriological and X-ray studies are necessary to determine whether the patient may continue his usual activities or whether hospital or sanatorium care is advisable.

The 12 city chest clinics and 13 voluntary clinics admitted, examined and treated 36,821 individuals who made 52,627 clinic visits in 1948. In addition 26,685 home visits to families were made by clinic public health nurses. The sharp rise in the number of new patients diagnosed as tuberculous is attributable to the influence of the mass surveys. This is indicated by the fact that in 1948 the number of new patients diagnosed as having minimal and moderately advanced tuberculosis increased greatly, whereas the number with far advanced tuberculosis was smaller. The increase in the number of tuberculin tests performed, in the number of X-ray examinations made, and especially in the number of sputum examinations is again evidence of the more elaborate study necessary particularly in patients discovered in X-ray surveys.

A clinical laboratory located in the quarters of the Municipal Laboratories at Front and Luzerne Streets has been equipped and staffed with a technician. This is for the purpose of examining the gastric contents of individuals who are suspected of having pulmonary tuberculosis and who are unable to submit a specimen of sputum. Heretofore, this service was not available to the patients in the city chest clinics except in rare instances when clinic physicians were able to make special arrangements to have it done for them.

It is anticipated that efficiency can be further increased by the consolidation of some of the clinics, since experience indicates the superiority of a few large, well staffed clinics with closer supervision of medical and nursing personnel.

### *Nursing*

The nursing staff of the Division of Tuberculosis now consists of a supervising public health nurse, five assistant supervising public health nurses and 42 staff nurses. Nine of the nursing staff are not available for the routine activities of the city chest clinics but are assigned to other projects either of this Division or of affiliated agencies. Two nurses are assigned to the Central Cooperative Clinic, two nurses to the special project at The Henry Phipps Institute, one nurse to each of the X-ray units, one to the BCG vaccination research project and

one to the Starr Centre Association. The nurses assigned to the city chest clinics made 18,369 visits during 1948 to families and to other agencies in behalf of patients. This represented a reduction in the number of visits in comparison with the year 1947 and is an indication of the need for increased nursing personnel in the field. Conferences of the nursing staff were held throughout the year. There were 6 general staff conferences, 4 district conferences and 16 supervisors' conferences. Monthly conferences are held of the nursing supervisors and the medical supervisor of the clinics.

### *Case Finding*

The mass survey program of the Division of Tuberculosis is directed by a supervisor of X-ray surveys who is assisted by a clinic physician. Their duties include not only the administration of the X-ray units but also supervision of the follow-up for patients whose survey films disclose possible tuberculosis. Three part-time roentgenologists are employed by this Division and are assigned to the interpretation of films at each of the units. About 150,000 small film X-rays are taken each year in this program. Four general hospitals are operating routine admission X-ray units in the admitting rooms. All out-patients as well as in-patients are routinely screened for tuberculosis.

### *Case Registry*

The Division of Tuberculosis operates a central case registry at its headquarters. Information is exchanged with all the local clinics and hospitals daily. The registry is designed to make readily available complete statistical data to guide and supervise the entire program.

### *Central Cooperative Clinic*

The Central Cooperative Clinic is under the joint auspices of the Division of Tuberculosis, the Public Health Service, the Philadelphia Tuberculosis and Health Association, and Temple University. This is a special clinic, now in its third year of operation of a 5-year research project for the follow-up of 500 patients (and their contacts) found in X-ray surveys.

### *The Henry Phipps Institute*

The cornerstone of advance in medical knowledge and treatment of the tuberculous is research in the laboratory and action research in a dispensary set-up. The Henry Phipps Institute is widely known for its scientific contribution to knowledge on the subject of the cause and treatment of tuberculosis.

Financed by the income of The Henry Phipps Memorial Fund of the University of Pennsylvania, by the Community Chest, by foundation funds for special research projects, and the Philadelphia Department



of Public Health, it operates a large dispensary for the care of tuberculous patients living in a section of Philadelphia specified by arrangement with the Department of Public Health. Care includes medical supervision of patients by full- and part-time physicians in the Institute and includes all modern facilities for the diagnosis of tuberculosis. Collapse therapy is administered on an out-patient basis. Twenty public health nurses render a nursing and health supervision service in the homes of tuberculous patients attending the dispensaries, with additional careful supervision of all members of the household. The integration of its services is apparent through close coordination with health and welfare agencies in Philadelphia, the city hospital institutions, the State sanatoria and other local and State institutions concerned with the care of tuberculosis.

### **Hospital Facilities**

#### ***Official***

The city health department provides hospitalization for about 518 patients in two hospitals—Philadelphia General and Municipal Contagious. In addition, about 400 Philadelphia patients are in three State sanatoria. This number is determined on a population basis. In addition, the State Department of Health, through the State Division of Tuberculosis, provides hospital care for patients transferred to local hospitals for surgery. All told there are about 918 public beds available for Philadelphians, and these form the principal resource for hospitalization.

#### ***Veterans' Facilities***

Veterans comprise approximately 10 percent of the tuberculosis case load in Philadelphia. They are eligible for medical care in any Veterans' Administration Hospital in the country and veterans whose disability is service-connected may obtain prompt care in most instances. Nonservice-connected cases are placed on waiting lists. The regional office of the Veterans' Administration located in Philadelphia manages the placement of veterans with tuberculosis and works closely with the health department and local clinics.

#### ***Naval Hospital***

This hospital, maintained by the United States Navy, has 31 beds for tuberculous patients who serve in the Navy.

#### ***General Hospitals***

By and large, these hospitals do not have a specific number of beds for tuberculosis as the patients have been admitted for special purposes, such as teaching, or surgery, or are discovered on other wards. Con-

sequently, they give care to relatively few tuberculosis patients. A total of 45 beds are provided.

The general hospitals operate under a variety of auspices; some are administered by universities, some are private or partially endowed. Most of these hospitals receive State aid but other sources of income vary.

In addition to giving general medical treatment, they conduct teaching and research, isolation, and have other special interests. Some have specially designated numbers of beds for tuberculosis patients but others do not knowingly admit them except for surgery or on an emergency basis.

### *Specialized Tuberculosis Hospitals*

There are six private specialized tuberculosis hospitals within the Philadelphia area, with bed capacities ranging from 76 to 188, providing a total of 474 beds. These hospitals give care to tuberculosis patients only. Surgery is available in one of these institutions. In addition to Philadelphians who receive care in these hospitals, there is an average of 150 residents of surrounding counties who come to these six institutions.

### **Philadelphia Tuberculosis and Health Association**

In any successful community effort to control tuberculosis, the local tuberculosis association has a significant role. It is in a position to take up new technical procedures more rapidly than official agencies which generally operate under both statutory and financial restrictions. As long ago as 1892, individuals recognized this opportunity for positive action in advancing the health of the people and formed, in Philadelphia, The Penn State Tuberculosis Society, the first tuberculosis association in the country.

Since its first major emphasis on tuberculosis control, its program has broadened to include general health. Operating with a staff of 55 employees, the Philadelphia Tuberculosis and Health Association expends approximately \$250,000 yearly in the following categories: (1) Development of health education programs with planning for tuberculous patient education; public education in relation to tuberculosis and general health; participation with five other special interest agencies in a coordinated health education program; (2) demonstration projects such as case finding by mass X-ray surveys; (3) rehabilitation and other patient services which cannot be provided through existing service agencies; (4) subsidy of The Henry Phipps Institute's Negro Bureau which employs eight Negro nurses and two Negro physicians, the primary purpose of this project being the training of professional workers of the Negro race in this field; (5) supplementing

**March 3, 1950**

873872-50-3



of the clinic services at The Henry Phipps Institute; (6) statistical studies and research in special projects related to tuberculosis; (7) collecting and reporting data for the Association of Tuberculosis Clinics; (8) providing patient information service.

Mass radiography, undertaken as one of its pioneering demonstrations, has been proven to be an essential in adequate case finding. It is at this point, with value proved, that this function should be completely taken over by the Department of Public Health which is now carrying this in part. This delegation of total responsibility to the official agency would release almost one-fourth of the Philadelphia Tuberculosis and Health Association's budget for the development and expansion of its health education, rehabilitation and social service programs.

Since rehabilitation plays such an important part in tuberculosis control, it is vital that this part of the control program be developed and considerably broadened. A recent study of 305 tuberculosis patients rehabilitated during a 10-year period draws conclusions which give promise of tremendous possibilities in this field. Demonstration to official agencies of the intrinsic value of this phase of tuberculosis control is the next necessary step.

\* \* \*

The success of the whole tuberculosis control program in Philadelphia is in the balance, at present due to an acute shortage of hospital and sanatorium beds for the treatment and isolation of tuberculosis patients. Admissions to the tuberculosis division of the Philadelphia General Hospital were 1,005 during 1948 as compared to 1,225 in 1947. Admissions to the State Sanatoria fell from the already low figure of 242 in 1947 to 155 in 1948 and 115 in 1949. There has been no significant extension of other facilities for hospital or sanatorium care, either under private or Federal auspices. There is a waiting list of over 527 city residents with active tuberculosis and with positive sputum registered with the Division of Tuberculosis. These patients constitute a danger to the community.

A cause for special concern is the fact that most of the overcrowded hospitals and sanatoria have felt it expedient to restrict admission to patients with positive sputum. Although this practice is justifiable as an emergency procedure, this makes adequate treatment impossible for patients with minimal tuberculosis and threatens to vitiate the value of the mass survey program which detects so many patients with minimal disease who would have a favorable prognosis with proper sanatorium treatment. It is urgent that plans be made for increased hospital and sanatorium facilities.

As a temporary expedient to accommodate some of the sputum positive patients who have been kept at home while awaiting admis-

sion to hospitals and sanatoria, the Department of Public Health has authorized use of the Philadelphia Hospital for Contagious Diseases and has recently provided equipment and personnel in order to make possible the use of 239 beds for the care of pulmonary tuberculosis. Extensive alterations and reorganization have been necessary in order to arrange for adequate care of a larger number of tuberculous patients at this hospital.

The hospitalization of tuberculous children has long been a major problem in this city. In order to facilitate transfer or admission of these children to institutions, application for admission must now be made to the Division of Tuberculosis of the Department of Public Health.

Twice in relatively recent years studies of the tuberculosis control program in Philadelphia have been made by an outside group. In 1922, such a study resulted in the establishment, during the following year, of a tuberculosis control division in the Department of Public Health and the establishment of city tuberculosis clinics instead of State clinics. Again in 1929, another survey resulted in improved case-finding programs, diagnostic clinics, and nursing follow-up.

This study, undertaken at the request of the official health agency is a comprehensive inquiry into all phases of the problem.



CITY OF PHILADELPHIA  
DEPARTMENT OF PUBLIC HEALTH  
ROOM 503, CITY HALL ANNEX  
PHILADELPHIA 7, PA.

RUFUS S. REEVES, M. D.  
DIRECTOR  
MYER SOLIS-COVEN, M. D.  
ASSISTANT DIRECTOR

February 9, 1950

Through Official Channels

Dr. Leonard A. Scheele, Surgeon General,  
United States Public Health Service,  
Washington 25, D. C.

Attention: Federal Security Agency

Dear Doctor Scheele:

The Department of Public Health of the City of Philadelphia is grateful to the United States Public Health Service for producing a comprehensive study of the tuberculosis problem in Philadelphia. We sincerely believe that the contents and recommendations of this report will serve as a valuable blueprint for the future development of tuberculosis control in Philadelphia.

The team of consultants have studied, in detail, the functions of some forty-three institutions and agencies and have given constructive advice relative to the individual agency program. From these advices certain gains in tuberculosis control are already apparent. Some of these improvements follow:

1. Completion of case registry containing information on over 11,000 patients.
2. Public Health Nurses formerly visited clinic patients. Now all, including private patients, are visited at least once.
3. Social workers and nurses have been added to hospital staffs.
4. Case finding by mass surveys has been improved.
5. All Chest Clinics have adopted uniform clinic records and clerks have been provided in other Chest Clinics.
6. The budget of the Philadelphia General Hospital has been increased to provide improved services and a full-time tuberculosis specialist in charge of treatment.
7. One hundred and forty-two additional tuberculosis beds have been added in our Contagious Diseases Hospital.
8. Plans are well under way for a reduction in number and an improvement in quality of our tuberculosis clinics in accordance with the proposed generalized District Health Centers.
9. Plans also include re-districting of clinic areas in accordance with the census tracts.

I take this opportunity to thank you, and especially the Division of Tuberculosis, for making this survey possible. We are looking forward to using this study as a base and a guide for future developments.

Respectfully,

Rufus S. Reeves, M. D.  
Director

RSR:rf

# **I. Social Services for the Tuberculous and Their Families**

By RUTH B. TAYLOR, M. A.\*

In order to achieve the objectives of any tuberculosis control program it is necessary to place all the men and women who have the disease under appropriate medical care. It is well known that all people must make certain social, as well as physical, adjustments to the disease and to medical treatment. Some make these adjustments without assistance, but many people need help. Because a patient's ability to benefit from medical care to the fullest extent depends upon his adjustment to the disease and the proper resolution of his social problems, the amount of social services and of rehabilitation services available in the community directly affect the control of tuberculosis.

Studying tuberculosis control facilities in a community therefore requires reviewing the social services offered to tuberculosis patients in the hospitals, clinics, and social agencies and the services of the rehabilitation facilities.<sup>1</sup> During such a review, certain questions must be kept in mind.

Are there medical social services in the hospitals and clinics to help patients with the emotional and social problems of adjustment to illness? Are there social resources in the community? Are both fully utilized? To what extent are these resources successful in helping contribute to the tuberculosis program of the community? When medical facilities are inadequate, are social facilities further strained? When social facilities are inadequate, is an additional burden thrust upon hospitals and clinics? In an effort to answer these and other questions, and to develop an approach to any analysis of the fundamental social needs of any community attempting to control tuberculosis this study was made, and this report is presented.

## **Findings**

The one fact which appears to prevail almost universally throughout Philadelphia's tuberculosis control efforts is a lack of integrated medical and social planning. This is evident in many areas of activity and in many practices of the agencies either directly or indirectly involved in tuberculosis control work.

It is possible that this lack of integrated planning may be attributed to an incomplete awareness of the social problems associated with tuberculosis. This is indicated by the frequently encountered com-

---

\* Medical Social Consultant, Division of Tuberculosis, Public Health Service.

ment that public and private social agencies are meeting all the needs of tuberculosis patients; this, however, is not at all the case, as may be seen in the report of detailed findings which appears later in this paper.

The following summarizes the principal evidences of the lack of integrated planning, as observed in the course of this study.

#### *No Medical Social Workers in Health Department*

Although the need for medical social workers in local health departments has become increasingly clear, there are no social workers employed by the health department. This, despite the fact that the total tuberculosis case load is estimated at 8,000 in the health department. Direct case-work services are therefore not available to patients either at the point of diagnosis or during the period subsequent to hospitalization, when some of the most serious problems come to light.

#### *Inadequate Social Service in Hospitals and Hospital Clinics*

Medical social service began to develop in hospitals nearly 50 years ago. There are well-established patterns of service and the principal objective is to help the individual meet those personal, social, and emotional problems which prevent his making the fullest possible use of the medical services offered him.

In Philadelphia, several of the general and specialized hospitals have well-developed medical social services. But in Philadelphia, as in nearly every other city in the Nation, the development of medical social service in tuberculosis hospitals has been slower; as a rule, in most places, the tuberculosis hospitals are less well staffed, both in numbers and in professional training. There is, however, a growing awareness of the importance of caring for social factors in tuberculosis, and this is leading to an increased use of medical social workers in tuberculosis medical settings, as well as improvements in qualifications of personnel. More medical social workers are definitely required for service in tuberculosis hospitals.

#### *Inadequate Professional Standards*

The term "social worker" is used very loosely in the Philadelphia hospitals and clinics. It covers a wide variety of personnel, with or without professional qualifications, who perform a multiplicity of services, many of which have no bearing on medical social work.

The complexities of social work are such that considerable training is required. Shortages of trained medical social workers and low salaries may be factors in securing staff. The health and social agencies which employ social workers should look forward to securing staff with specialized training.

Standards for medical social workers in the general hospitals are somewhat higher than in tuberculosis institutions. This is of very little advantage to tuberculosis patients, however, because relatively few of them are treated in general hospitals.

### *Few Tuberculosis Patients Served by Social Agencies*

In organization, social agencies in Philadelphia are similar to those in other communities where social welfare is in an advanced stage of development. Although there are some major differences between and among the public and private agencies, they appear to be able to meet, with reasonable adequacy, most of the problems which come to their attention. Public assistance grants are low but are higher than in some comparable communities and the agency policies are fairly flexible. Private agency supplementation is occasionally done on the basis of a joint agreement. Provisions are made by all the different resources for most of the medical-social needs of the patient on agency case loads—except, in most instances, payment for medical care which should not be the responsibility of social agencies. Within their limitations, largely budgetary, they are offering a variety of services.

Nevertheless, very few tuberculosis patients or families are receiving service from any of the social agencies. Although the agencies' executives expressed their willingness to have their resources utilized more fully for tuberculosis patients, the small number of such persons receiving service from any of the major social agencies raises important questions. There were some differences of opinion about the readiness with which referrals were accepted by either the private or public agencies. The fact that even the Department of Public Assistance has only a small number of such cases (possibly only 2 percent of its total case load) and the private agencies practically none, may indicate either insufficient referrals of tuberculosis patients and their families to the social agencies or other factors, such as eligibility requirements which may restrict the numbers of persons who are eligible for care. The Philadelphia County Board of Assistance would not reject a client only because he has tuberculosis should he qualify under all provisions of the Public Assistance law. On the other hand, with some of the agencies there may be resistance to accept tuberculosis patients because of the length of time for which care is required and for various other reasons. In view of the general assumption that the majority of tuberculosis patients have many social problems, it would be reasonable to suppose that a fairly large number of them would be known to some social agency. This is not the case in Philadelphia, even granting the admitted inaccuracy of the figures which the agencies reported. Lack of referrals can probably be traced in part to the inadequate medical social services in the hospitals and clinics.



Social agencies are in a strategic position to press for more adequate medical social services and medical care in the community. Very little medical social service is available to patients even during the period of active treatment and practically none at the point of diagnosis and after discharge. Although it would seem that some agency should be partially compensating for this deficiency the social agencies are not getting the patients to any great extent.

### *Inadequate Provision for Hospital Care*

The successful treatment of tuberculosis requires that there be sufficient physical hospitalization facilities to meet actual needs, and, furthermore, that these facilities be available to all who need them without reference to their ability to pay for hospital care. In Philadelphia, two factors interfere with this: The extreme shortage of beds for the hospitalization of tuberculosis patients, and the financial requirements at some of the institutions.

The concept that tuberculosis is a public health responsibility has been accepted by the health department which offers free medical care in Philadelphia General Hospital and in the Philadelphia Hospital for Contagious Diseases. In some of the private hospitals, however, preference in admission apparently is given patients who can pay full rates, and in some of these which do accept part-pay patients, pressure is sometimes exerted on patients to get them to pay as much as possible. Much speculation was encountered about the possible effect of differences in the facilities and services available for full-pay patients as against those provided to patients who receive free care.

### *Insufficient Allowances for Minor Expenses*

Patients in tuberculosis hospitals need allowances for their minor personal expenses during the period of institutional care. This is true for many patients—not just the recipients of public assistance. The State sanatoria have some funds from private sources to be used for patients' needs. However, in most of the local sanatoria and hospitals funds for this purpose are lacking. In some instances, the financial needs are temporary but expensive items such as clothing often create problems, and considerable shopping around has to be done by the social workers to find a resource which will provide the funds. Private community resources are able to meet only a part of this problem.

### *Insufficient Ancillary Services*

The lack of ancillary personnel, such as occupational therapists, vocational counselors, school teachers, in the tuberculosis hospitals and the inadequacy or unavailability of such service for tuberculosis patients in most of the other institutions presents a serious need of which the local professional staffs are very much aware. This diffi-



culty seems primarily the result of insufficient funds and personnel. To some extent, however, it indicates a need for better education to counteract the fear of tuberculosis among the people who are available. On the other hand, there are those who are willing to work in tuberculosis settings. With administrative approval, teachers, for example, could extend their much needed services to tuberculosis patients.

### *Dealing with Resistance to Medical Treatment*

Resistance to the diagnosis and treatment is one of the difficult problems with which doctors, nurses, and social workers must deal. Some patients whose resistance is so great that they do not want to enter the hospital or observe reasonable precautions threaten the safety of others. Such persons are sometimes termed "recalcitrant." The health officer may eventually be faced with the difficult decision of using his authority to protect the individual and the community. This question has been a matter of serious concern to the Philadelphia Health Department which has evolved a plan of court commitment of all "incurable" patients in one of the tuberculosis hospitals maintained by the Health Department. During 1948, 84 patients were forcibly hospitalized under this plan. Although the services of medical social workers frequently obviate the need for forcible hospitalization by helping to resolve the patient's resistance to treatment, no such services were available to handle these patients.

This whole subject is receiving more and more attention in many parts of the country. All patients are resistant to a greater or lesser degree at some stage of the disease. With some, this behavior appears to be both anti-social and self-destructive. With others, resistance may continue to be very strong although it may be hidden under a seeming acquiescence to recommendations for care. In such instances, the self-destructive forces may be as great although other people are not endangered. As we acquire greater understanding of the causes of such behavior, there will be greater skill on the part of all who deal with patients.

### *Lack of Psychiatric Services*

Many of the hospitals studied had psychiatric services. These were utilized rarely for the tuberculosis patients themselves, and even more rarely for consultation by the doctors, nurses, and social workers caring for the patients. In a disease in which psychological and emotional factors play such an important part, it is essential that psychiatric knowledge be employed in direct service to patients, where necessary and possible, and in a consultant capacity to those caring for the patients so that their skill may be increased.

March 3, 1950

## Recommendations

In all communities, including Philadelphia, there are certain needs fundamental to tuberculosis control, such as adequate housing, adequate numbers of beds for the tuberculous, enough doctors and public health nurses, sufficient social resources, and a well-defined tuberculosis control program. Although all of these interdependent and social needs are based, in part, on other needs, the recommendations in this section are confined primarily to medical social services and community social agencies.

### *Medical Social Work*

Medical social workers should be provided in the local health department to give case-work services to tuberculosis patients, to provide consultation to other professional persons working with the tuberculous, to develop closer working relationships with other community social agencies, and to furnish data on the unknown social needs among the tuberculous so that additional social facilities may be developed.

A medical social consultant should be added to the staff of the Health and Welfare Council. She should assume some responsibility for improving the standards for social service in the settings where social workers are already employed and stimulate their employment in other places where they are needed.

The number of trained medical social workers in the hospitals should be increased to provide more adequate service to the patients, and the inappropriate administrative jobs being handled by many medical social workers should be assigned to the proper persons.

### *Coordination*

There should be greater coordination between medical, social, and rehabilitation facilities. More patients should be referred from medical sources, and the services of the social and rehabilitation agencies should be made available to a larger group of tuberculosis patients, including more of those not receiving financial assistance. This involves reconsideration of some agency regulations and policies.

Preadmission, predischage and post-sanatorium supervision for both the patient and the family are responsibilities of social agencies as well as of medical and medical social service personnel.

Evaluation of individual needs requires close coordination on the part of physicians, medical social workers, nurses, vocational counselors, and occupational therapists.

Special attention should be given to serious or complicated rehabilitation problems especially among patients over 50, minority groups, chronics, patients with special aptitudes but a limited market for

their skills, and marginal income persons not now eligible for care from the official agency because of the means test.

Educational and vocational programs should be initiated as soon as the individual patient is medically ready.

The number of qualified workers in vocational rehabilitation and occupational therapy should be increased to provide more adequate services.

### *Research*

Social research in tuberculosis is much needed, not only to explore further the local situation in Philadelphia but also to add to our present scanty knowledge. The several research agencies in the city might be stimulated to conduct or participate in some studies of this type. Medical social workers in the hospitals and clinics are in a position to point up areas for study and to provide material even if they do not at present have the time to do the analyses themselves. One problem particularly suggested for investigation is the "recalcitrant" patients who have experienced forcible hospitalization. Another is the adequacy of financial assistance for tuberculosis patients; and a third is a study to determine the unmet needs of the marginal-income group who are not eligible for public assistance. The area of vocational rehabilitation suggests other problems for study. Such studies might provide standards or criteria for determining who needs vocational rehabilitation, what persons will benefit by rehabilitation services and when a person is to be considered rehabilitated.

### *Special Problems*

There should be a review of the legal or administrative restrictions for services to tuberculosis patients, specifically: those which prevent school teachers from going into tuberculosis institutions or to homes where there is any person with the disease, those which exclude tuberculosis patients from the homebound programs, and from rehabilitation benefits under Workmen's Compensation Laws, and those which handicap the nonresident, the noncitizen, and the marginal-wage group.

Psychiatric services should be further utilized and developed.

There is need for special funds (to be administered by the Social Service Departments) in sanatoria, hospitals, and clinics to meet personal, or emergency, or medical relief needs of all patients.

Housekeeping services for families where one or both of the parents are ill and children need care should be extended far beyond the present limited clientele of a single agency.

### **Social Services in Medical and Public Health Settings**

Medical social services have been developing in the United States

since the early years of this century but this development has been extremely uneven. In some communities, and in some hospitals, medical social services are excellent. In many places this is not yet true, and in some communities the services in specialized hospitals have developed even more slowly. High standards of medical social work have been developed in many general hospitals and in some few specialized hospitals, like those for children with tuberculosis. In most tuberculosis hospitals such services either have not been developed at all or have not attained desired standards of service or professionally trained staff.

The reason for the inadequacy of medical social service in tuberculosis hospitals is not clear. Whether it results from the isolation of many sanatoria and the difficulty of recruiting personnel, or some worker's hesitation to deal with tuberculosis patients, or lack of experience with social work on the part of tuberculosis doctors is undetermined. But the inadequacy is particularly important in view of the obvious relationship between social factors and tuberculosis.

Philadelphia has progressed beyond many cities; practically all of its tuberculosis hospitals have some degree of social service, albeit of uneven quality. Even with variations in services, a start has been made. That the needs of the patients have been recognized, by and large, is clear. Further development of these services remains to be accomplished.

### *Health Department*

There are in Philadelphia about 13,000 people known to have tuberculosis. Information available from health department records indicates that more than 5,000 are classified as inactive leaving less than 8,000 active and questionably active cases. Of these about 1,000 are hospitalized. An additional 500 are waiting for hospitalization. Approximately 5,500 are under care of private doctors and in clinics. The 12 city chest clinics gave 29,127 examinations and treatments to 11,863 individuals in 1948.

We know from experience that we may expect a variety of social problems among these people. Many patients will have fears about the illness and the treatment, they will be concerned about family dislocations, the cost of medical care, or the possible loss of social status. Some suffer such anxiety that they resist the diagnosis and the recommended treatment. Among the 500 men and women waiting for hospital beds in Philadelphia there will be some with problems of personal adjustment, family finances, housing, and we realize that some of their difficulties may be intensified because they are under care at home. And, of course, husbands, wives, and children of patients are personally and socially affected.

### *Social Service in the Health Department*

There are no social workers in the health department or the health department clinics so that little specific information regarding social problems of clinic patients could be secured. Some of the clinic patients receive services from community social agencies but the extent of the social need among the tuberculosis patients remains substantially unknown. Whether more patients require social services was not determined nor is it known how many would benefit from medical social services in the clinics themselves. The doctors and public health nurses are, of course, doing all they can to alleviate problems as they see them.

The extent to which social conditions contribute to reluctance to enter hospitals or to follow other medical treatment cannot be ascertained without the social service personnel to serve the patients and study the social needs.

Special mention should be made, however, of the Central Cooperative Clinic which has the services of a medical social worker two-thirds of the time. She is responsible for the full patient load, and sees each patient on admission to the clinic, and as indicated thereafter. Case-work service is extended to family members and to contacts. This social worker also offers consultation services to members of the clinic staff, and works closely with other community medical and social facilities.

At the Phipps Institute, clinic therapy conferences are held weekly. Social workers from community social agencies are invited to participate and attempts are made to integrate medical and social planning.

### *Public Hospitals*

Public hospitalization is available in Philadelphia for 918 persons. The State Health Department supplies about 400 beds for Philadelphians in its three sanatoria. There are 518 beds, including 22 for children, in the 2 hospitals maintained by the City Health Department and the State pays for care for some patients at nonofficial, nonsectarian hospitals. Under a system known as State Aid, Pennsylvania pays private hospitals eligible for these funds at the rate of \$5.50 per day per patient for persons unable to pay their own hospitalization expenses. The hospitals request the total amount needed (based on an estimate) and receive the funds in a lump sum. These funds may be applied to the care of the tuberculous as well as to other patients. The State Department of Health also provides care for patients transferred to local hospitals, pays full private room rates and fees for special nurses, and provides streptomycin.

### *Social Services in Public Hospitals*

The two hospitals maintained by the city, Philadelphia General and



Philadelphia Hospital for Contagious Diseases, which care for tuberculous as well as other patients, also provide social service for tuberculosis patients. The larger hospital, Philadelphia General with 376 tuberculosis patients, has one social worker for the tuberculosis unit<sup>1</sup> who is responsible for all tuberculosis patients and has administrative and other responsibilities as well. There are approximately 10 admissions and discharges a day. It is obvious that one social worker cannot know, much less meet all the needs of such a large group of patients and it is inevitable that many of the patients' problems must remain unknown and unmet.

In situations such as this, and this is unfortunately a common story in much of the United States, despite the valuable services which are being given, much of the social worker's time must be devoted to emergencies and other nonsocial case-work responsibilities. Experience has shown us that adequate social services can prevent many social emergencies which aggravate the medical condition and at least partially nullify the medical treatment.

In the Philadelphia Hospital for Contagious Diseases there are two social workers who are able to devote relatively little time to the tuberculosis ward and who also have administrative and other responsibilities.<sup>2</sup> The "forcible hospitalization" patients are among those sent to this hospital. This group alone requires considerable social attention. Intensive case-work service is necessary to help these patients, many of whose problems stem from their social situations and from their own protest against these situations.

In the State hospitals there is, by and large, no social service. It was agreed by the advisory committee (page 302) that no detailed study be made of these hospitals, but because of their importance in the over-all measures for tuberculosis control, a few general comments are included. The writer had previously made visits to two State sanatoria. In one, the medical director was keenly aware of the social and emotional implications of tuberculosis. He was especially concerned about the discharge-against-advice rate and interested in developing a program of social service. Efforts are being made to recruit a trained social worker. One part-time untrained worker has been assisting with some problems. In another hospital which performs surgery for patients from the other State institutions, there is no social service.<sup>3</sup>

Although there are more than 900 patients in 5 public hospitals there is the equivalent of about 2 social workers to serve them.

<sup>1</sup> Another social worker has since been assigned to the tuberculosis department of the Philadelphia General Hospital.

<sup>2</sup> An admission division has recently been established, so that social workers are relieved of certain administrative duties and permitted more time to serve patients and their families.

<sup>3</sup> Since the material for this report was gathered, and as a result of this study, a full-time social worker has been employed by one State hospital and a second social worker is to be assigned to another State hospital on February 1, 1950.

### *Naval Hospital*

Social services are supplied by the American Red Cross and two social workers serve the tuberculosis patients on a part-time basis.

### *General Hospitals*

The general hospitals have relatively few tuberculosis patients and a specific number of beds is, by and large, not set aside for them.

Policies regarding admission and retention of tuberculosis patients are dependent upon a number of factors besides the bed capacity. Most of the nonpublic institutions transfer tuberculosis patients to other tuberculosis facilities as soon as possible. Such transfers are not effected very rapidly, however, because of the long waiting lists for beds in the tuberculosis hospitals.

General admission policies are not especially significant since they are not unique. All of the hospitals seem to have fairly liberal policies, in spite of pressures for hospital service. Most of them try to limit their admissions to residents of Philadelphia, some accept nonresidents if they are able to pay full rates.

Payment for in-patient service (by the tuberculosis patients) is not reported as a particular problem in the general hospitals. It is true that there is a relatively small number of tuberculosis cases in these institutions.

### *Social Services in General Hospitals*

The five private general hospitals and the U. S. Naval Hospital all have social service departments. Each has a director of social service and in some instances, a case supervisor also. In one, there is a social worker assigned full time to tuberculosis; in the others there is part-time service as needed.

In three of the hospitals the social workers assume responsibility for all patients from the point of admission. Sometimes they take up this responsibility in the preadmission stages in the clinics and follow through post discharge. This is an ideal arrangement, rarely encountered. In these hospitals which are more adequately staffed than the public hospitals, the social workers are able to give more time to patients' needs. In some, however, they perform a variety of administrative services: They determine financial medical eligibility or secure appliances or arrange for special diets. This means they have less time to spend on patients' personal problems.

The writer was unable to obtain the exact number of tuberculosis patients in these hospitals, but relatively few tuberculosis patients were referred to the social workers. Referral on the basis of the diagnosis is not routine.

Although social services are available in these hospitals, they are of very little benefit to tuberculosis patients as a group, since there are only a few such patients in these general hospitals.



### *Specialized Tuberculosis Hospitals*

The specialized tuberculosis hospitals (in addition to the State and local health department hospitals already mentioned) are all private institutions with bed capacities ranging from 76 to 188. They provide a total of 474 beds. Three receive funds from the community chest and two also receive some State aid funds. They are supported primarily by private or religious groups. Because there are no tuberculosis facilities in surrounding counties, fees are paid by the counties for their residents who are hospitalized in Philadelphia when these patients are unable to meet this expense. In all of these institutions patients' payments constitute a major part of the hospital's income. All of them report that they have some free beds but the number is small. They also have a sliding scale for patients according to ability to pay, but one gets the impression that preferential consideration is given to patients who are able to meet the full cost of medical care. Most of the rates vary from \$35 to \$70 per week dependent upon the type of bed (ward or private) and the institution. The maximum rate at one hospital is \$30, but the majority of patients at this hospital pay \$21 per week.

These institutions, with one exception, provide all forms of medical care. Some patients are transferred to the State sanatoria, but full responsibility for care is assumed pending such a transfer. Because of the long period before admission to the sanatoria, and because some patients resist transfer, many receive their full medical treatment in the private hospitals. Consequently, the hospitals screen their admissions rather carefully, accepting patients who best meet their individual (and usually different) eligibility requirements.

Most of the hospitals have some residence limitations but admit nonresidents under certain conditions.

### *Social Service in Specialized Tuberculosis Hospitals*

All of these tuberculosis hospitals have social service departments, but there is marked variation in the activities performed. In one hospital which has the services of a trained social worker there is considerable emphasis on case-work services. Here the discharge-against-advice rate is very low. In the others, the social service personnel, consisting of persons with a variety of backgrounds, are meeting some social problems, but are principally responsible for certain administrative and nonsocial-work activities. In all these hospitals, the social service departments are responsible for admitting, determining financial status, and recommending rate of payment and fee adjustments.

In some, the social workers are not stationed in the hospital but have other community responsibilities so that they visit the patients at intervals and when other duties permit.

Most of these hospitals are so small that the case loads can be handled by one social worker. In two hospitals, case work is admittedly not the major function of the social service department, so that the personal and social needs of the patients inevitably get less attention because of the pressures of other responsibilities. In a third, coverage and service is apparently reasonably adequate even though the social worker is combining administration and case-work activities.

The training and skill of these workers varied considerably as did the kinds of service they gave and the use they made of community agencies.

The social workers in the tuberculosis hospitals were well aware of community and patient needs. They pointed out the need for more financial assistance not only for public assistance recipients but to other patients. They wanted more psychiatric consultation, extension of social, rehabilitation, and occupational therapy services, an opportunity to conduct social research, and free medical treatment for tuberculosis. They emphasized the critical shortage of hospital beds.

### *Voluntary Health Agency*

The Philadelphia Tuberculosis and Health Association provides many services which are primarily related to tuberculosis but also include social hygiene and cardiac problems. The usual eligibility requirements of residence, race, religion, age, etc., do not apply. The principal function of the agency is to act as a referral service to other community services and as a consultant to other agencies. Financial assistance is given on a selective basis usually to those persons who need this help to carry out a vocational rehabilitation plan. Orientation to the problems of tuberculosis not only is provided to the staff but is extended to include workers from other agencies. Special projects are undertaken to test the applicability of newly proposed activities. Some informal research has been done collaboratively and is planned for the future. The Association attempts to supplement the services provided by any other agencies wherever necessary. By a special arrangement with the Veterans' Administration, the Philadelphia Tuberculosis and Health Association operates a special service for veterans whose disability is not service-connected.

### **Social Agencies in Philadelphia**

Nowhere in the Nation have we sufficiently explored the role of community social agencies in tuberculosis control or their potential contribution to the eradication of the disease. It is generally recognized that when families are in need of public assistance the department of welfare is the principal source of aid. In some communities, private

agencies can supplement the work of the public agency in special instances, but the role of these private agencies in tuberculosis control is not as clearly delineated as that of the public agencies. Are there social agencies to which families can turn not necessarily for money, but for help in adjusting to the demands of a disease which has complicated the lives of an entire household? What services can these agencies give? To what extent do these agencies in Philadelphia take part in the tuberculosis control effort?

Some of the medical social workers in the medical settings previously discussed felt that the community agencies accepted referrals well and relieved need with direct case work service. Others felt that the needs of the patients and families were very great but were not being met adequately in the community.

### *Scope of Social Agency Services to the Tuberculous*

That the city is attempting to meet the social needs of the general population in Philadelphia is shown by the scope of the program of its public agencies which provide basic subsistence needs and by the multiplicity of private social agencies which attempt to meet specialized problems and supply a skilled case-work service.

But the private agencies for adults and children are serving only a few tuberculosis patients. This is regrettable since these agencies are equipped to meet social and financial problems. Exact figures are not kept, but estimates of several agencies were: in one agency, approximately 2 or 3 tuberculosis patients out of a total present case load of 225; in another, 15 in the past year out of a total of 700; and, in a third agency, 39 persons out of approximately 1,200. Thus, 3 private agencies serving 2,125 cases (representing an unknown number of persons) are giving services to approximately 56 tuberculosis patients or families. The County Board of Assistance helped at least 600 individuals in whose families there was tuberculosis. There are no data available in any of the agencies to indicate whether these figures were increasing, decreasing, or remaining static.

Since none of the agencies has any restrictions about accepting tuberculous patients (who otherwise meet eligibility requirements), the directors explained that the small number of such cases was due to a limited number of referrals. This implied a serious lack of qualified medical social workers in the places where the patients are diagnosed or treated. The directors all felt that the services of their respective agencies met the needs of most tuberculosis patients. No resistance to accepting such cases was expressed by the social agencies although some of the medical agencies had reported occasional difficulties caused by regulations in the social agencies.

The agencies make an attempt to orient their staff members to tuberculosis problems through staff meetings, supervision, and reading

material but there are no medical social consultants. Case workers attend medical staff conferences on individual cases at Phipps Institute. Psychiatrists are on the staff of most of these agencies and their services are available to case workers for consultation but are not available, as a rule, for the treatment of clients. With so few tuberculosis cases, however, this important service can be directed to only a fraction of the tuberculosis population.

All cases are handled on an individual basis. Procedures are adapted to the needs of the specific situation. Case workers receive medical information, occasionally visit patients in hospitals, exchange social summaries with medical social workers in hospitals, and share responsibility in getting contacts examined. As stated, all these services are available to the few tuberculosis people who get to the agencies. As a rule, no special attention has been devoted to tuberculosis nor have special procedures been developed for such patients or families because the small number of cases have not warranted special consideration. Research in tuberculosis has not been done in the agencies themselves. They have assisted on studies of other problems but have made none on tuberculosis.<sup>4</sup>

### *Official or Public Agencies*

In Philadelphia the Department of Public Welfare maintains the charitable, correctional or reformatory institutions and agencies under city control and provides care for adults and children who need certain services. The Department of Public Welfare provides the only public child welfare service in Philadelphia. It maintains a shelter and boarding house for legal residents and transients pending their removal to their place of legal settlement, and places a limited number of children in foster homes. It is not to be confused with the Philadelphia County Board of Assistance which is one of the 67 county administrations of the State Department of Public Assistance. The County Board administers the three special types of public assistance (Old Age Assistance, Aid to Dependent Children, and Pensions for the Blind) and general assistance.

The State Department of Public Assistance which administers all public assistance is the major public social agency, and provides a potential resource for the basic maintenance of tuberculous persons for whom no other resource is available. The number of professionally qualified case workers in this agency is proportionately smaller than in the others. The financial grants given to recipients are regulated by law and agency policy, and are available to all persons in need, regardless of the reasons contributing to their economic dependency. The maximum monthly amounts given are \$55 for a single person on Gen-

<sup>4</sup> As a result of the interview for this study, one agency decided to engage in an informal study of its case load and to arrange a conference on tuberculosis.

eral Assistance or Old Age Assistance, \$40 for a Blind Pension; for Aid to Dependent Children and General Assistance families, the amount depends upon the size of the family. For a family of four the maximum amount is \$131. In individual cases, specific needs may be met in excess of these maximums, to allow for such things as special diets, transportation to clinics, etc. There is no delay in processing applications.

The basic concept in the administration of all public assistance is the need of the individual, regardless of the reasons contributing to his need. Therefore, public assistance agencies do not have readily available statistics regarding the specific reasons for the financial need of all families in the entire case load, and such data can be secured only by specific research into the causes of financial dependency.

*Tuberculosis.* It was not possible to obtain the number of persons with tuberculosis, or of families in which there is tuberculosis, who are receiving public assistance. However, in Philadelphia, the County Board of Assistance has available data on all the special diet allowances given to individuals. The figures obtained from a count of the diet allowances given by the Philadelphia County Board of Assistance provide some data on the number of tuberculous patients under its care. The count was made by individual and family unit of the numbers receiving special diets because of tuberculosis and included both patients and contacts, but the number of each is not known. It excluded, of course, patients in hospitals although relatives at home may have been included. These data cannot be considered an accurate or complete count of the tuberculosis patients or their contacts receiving public assistance in Philadelphia, but may be some indication of the size of the case load.

The Philadelphia County Board of Assistance supplied the following information on special diets as of October 1948. The tabulation shows the number of persons receiving public assistance in Philadelphia and the number receiving special diets because they are tuberculosis patients or contacts.

	Cases	Individuals
Total.....	42, 100	82, 400
Special diets because of tuberculosis.....	382	600
Old age assistance.....	55	55
Aid to dependent children.....	150	350
General assistance.....	175	195
Blind pension.....	2	2

#### *Private Agencies*

As in the public agencies, services are given to all clients on an individual basis. Policies are liberalized whenever possible and



wherever necessary. Supplementary financial assistance can be provided by the private agencies for persons receiving public assistance grants on the basis of an agreement recently worked out jointly. For example: A family requiring special allowances above the public agency maximum can receive additional help in some instances. Within or between the public and private agencies, policies permit the meeting of almost any reasonable need including transportation, housekeeping service, psychiatric consultation, special medical needs, and medical treatment. If these services are not supplied by the private agency, they can be purchased elsewhere or provision is made for increasing the patient's income so that he can obtain them for himself.

*Tuberculosis.* Some of the agencies have special services for which tuberculous patients among others are eligible. One agency conducts a counseling service for the aged and an information center and referral service to social agencies in the community. Another has a personal aid bureau for inmates of penal institutions and parolees, a small business loan or counseling department and makes special provisions for the refugee and immigrant. Several agencies share the medical facilities of the Community Health Center which provides periodic physical examinations for their clients, and one provides case-work service for three day nurseries. The Homemakers' Service (visiting housekeepers) of one agency and home economists are also valuable potential resource, for tuberculosis patients.

Although services of almost all varieties are available only a handful of tuberculosis patients receive them. The reasons for this are not known. Are an insufficient number referred to these agencies? Are the agency admission policies restrictive? Are there other possible explanations?

### *Special Agencies for Children*

Private children's agencies supply the major child welfare services with the exception of those rendered by the Department of Public Welfare and the Philadelphia County Board of Assistance (Aid to Dependent Children).

Policies are regulated both by charter and by supervising boards. Most of the agencies are on rather limited budgets which in turn limit the number of cases they can accept. All the children's agencies provide some medical attention for the children under care including physical examinations, tuberculin tests and X-rays when indicated.

Among the case-work staff in the children's agencies professional qualifications vary. Only one executive reported that all staff members have full social work training. Several agencies have some partially trained workers or some members of the staff who have completed their training. In addition to case workers, the agencies

have one or more personnel from other professions, such as: psychiatry, psychology, dietetics, teaching and vocational counseling.

*Tuberculosis.* One of the serious problems found everywhere in tuberculosis control is how to care for the children of tuberculous parents and for tuberculous children whose homes are unsuitable. There are many cases of hardship known to doctors, nurses, and medical social workers, but inquiry into the case loads of children's agencies in several communities has revealed very few such children under care. This is true in Philadelphia. Again, the explanation for this is not known. Perhaps the need is not always recognized. Many families, unaware of community resources, may make their own arrangements. Sometimes those arrangements are satisfactory. On other occasions, the family, and more often the child, pays a heavy price. Often a child is separated not only from the sick parent but from the other because of new living arrangements or employment of the remaining parent. If community resources are properly utilized it is often possible to prevent the complete breakup of a family during periods of crisis.

The numbers of cases of children with tuberculosis handled by these agencies were somewhat difficult to obtain because no such statistics are maintained. Specific intake policies for tuberculous children have not been defined because the number of referrals has not demanded any such consideration. In general, the agency executive thought they could handle most of these situations. None of the agencies reported any instances in which children were forcibly removed from their homes to break contact with tuberculosis, although such a possibility is implied in the regulations enabling forcible hospitalization when necessary. In no case was medical care ordered by the court when the parent had refused it for the child. Special diet allowances are given if they are medically recommended. The River Crest Preventorium serves primarily for the temporary placement of children who are contacts or who have healed lesions. The bed capacity is 100, but average occupancy is 50.

Few active tuberculosis cases were known to any of the children's agencies. One, however, reported two deaths from tuberculosis in its annual report for the preceding year. In almost no instance has there been a request to place a child with arrested tuberculosis in an institution or foster home after he has been discharged from a hospital. There have been few requests for replacement of primary cases to prevent further activation. Two agencies reported a fairly large number of contacts; one had no available figures, and the other had placed 28 children out of a total case load of more than 350 during the previous year. It is not surprising, considering the low incidence rate among children, that few tuberculous children require service. It is not known, however, why more service was not rendered to children of parents with



tuberculosis. Again, is this due to lack of referrals from the medical agencies or restrictive eligibility requirements among the social agencies? What is happening to the children of the tuberculous?

### *Social Services in Specialized Agencies*

The American Red Cross, Travelers' Aid, and Veterans' Administration are all national organizations with local chapters or offices in many parts of the Nation. All supply social service but have, of course, different kinds of administrative policies, functions, and procedures.

*American Red Cross.* Provides social service at the United States Naval Hospital in Philadelphia. The Southeastern Pennsylvania Chapter serves five counties, including Philadelphia. Its major responsibilities are described as multiple health and welfare services. Red Cross services are primarily related to problems arising from military service and are given to servicemen, veterans and/or dependents of each. Many receive some type of service for problems relating to government benefits and for family or personal problems. There is close coordination between the Chapter and the hospitals in planning for patients, and in the use of community resources. Financial assistance, based on community budgetary standards, is given in some instances.

During the period of study only five tuberculosis cases could be identified in the group receiving financial assistance. These had not required any special planning and each problem was handled on an individual basis. It is possible that there may have been more tuberculosis cases or problems. Most of the services given by the Red Cross are emergency or temporary. A longer contact or more careful analysis might have revealed additional health problems. The flexibility of policies in the Red Cross is a major asset; the agency apparently can meet most needs through the Chapter itself or through referral to appropriate resources.

*Veterans' Administration.* Tuberculous veterans are eligible for benefits under the terms of Federal legislation. Public Law 458 (July 16, 1947) stipulates that disability pensions can continue for 2 years after tuberculosis has been arrested and that reduced pensions can be subsequently continued for varying periods of time. The maximum current disability pensions are \$138 a month for veterans with service-connected disability and \$60 for permanently and totally disabled veterans with nonservice-connected disability.<sup>5</sup> Additional amounts are given for dependents if the veteran has a 60 percent disability. If necessary, the pensions may be supplemented by public and private social agencies.

Tuberculosis patients who are veterans and eligible for these benefits thus have, by law, an advantage over other tuberculosis patients

<sup>5</sup> Public Law 339 (81st Cong., October 1949) has further extended the benefits for tuberculosis.

because much of the basic financial insecurity is relieved even though other pressing social problems are known to remain.<sup>6</sup>

There were 988 veterans with tuberculosis in the Philadelphia area of whom 554 had tuberculosis classified as nonservice-connected. The social workers in the Veterans' Administration hospitals and regional offices are responsible for social follow-up of patients. The over-all procedures are established by the central office of the Veterans' Administration. Social service begins in the regional out-patient clinic, is continued by the hospital social workers through the period of hospitalization, and in the case of veterans with service-connected disabilities is further continued by the regional office after discharge. During the patient's hospitalization the regional office continues to work with the family when the veteran's problem is related to the home situation, coordinating its work with that of the social service department in the hospital and community social agencies to which the families are referred. The regional office in Philadelphia serves the Philadelphia veteran patients hospitalized in any Veterans' Administration hospital, although most of these patients are sent to Veterans' Administration hospitals in the Western part of Pennsylvania. The veterans with nonservice-connected illness who require social services receive them from local social service agencies, and some special services from the local tuberculosis association. The social service staff in the regional office has been developing its social service in relation to tuberculous veterans and believes that services to these patients could be greatly improved. One of their difficulties has been staff shortages; local veteran clinics for outpatient service and hospital facilities have become available only recently and more experience is needed so that policies and procedures can be developed.

*Travelers' Aid Society.* The Travelers' Aid assists "moving persons," the transients, travelers, newcomers, and nonresidents. Other community resources for this group are limited. Their services are usually on an emergency basis and medical problems do not come to their attention unless the "moving person" is obviously or seriously ill. For this reason, it would be very difficult for the agency to know the number of tuberculosis patients they may have served. The director could recall only two and in both of these instances the particular problem was an attempt to obtain a hospital bed through the local department of health. Her comments were, accordingly, in relation to the general problems of persons coming to the agency's attention rather than specifically concerning tuberculosis. She agreed with some of the other executives that legal residence requirements and the lack of adequate housing were major difficulties in Philadelphia.

<sup>6</sup> Tollen, Wm. B. Irregular Discharge: The problem of hospitalization of the tuberculous, VA Pamphlet 10-27. Pub. Health Rep. 63: 1441 (1948).

## Rehabilitation Services

Rehabilitation services for tuberculosis patients in Philadelphia are somewhat difficult to evaluate because of lack of standards. The number of patients requiring rehabilitation was unknown, and there were variations in numbers of referrals, adequacy and availability of services among different agencies. Marked differences are found in different types of medical settings and in the extent to which the available resources have been used. The general hospitals have more types of service than the sanatoria. Most of the former have occupational therapists or recreational workers, librarians and teachers but no rehabilitation counselors. However, these persons give little or no care to tuberculosis patients.

The private tuberculosis hospitals have less variety of service than the general hospitals but counselors from the Philadelphia Office of the State Bureau of Rehabilitation are available for consultation service. The private sanatoria are fairly well staffed; they are small enough for services to be handled adequately by one full-time person. In one public hospital the occupational therapist spends half time on tuberculosis patients.<sup>7</sup> There was formerly a rehabilitation center which is to be reestablished some time in the near future. The State sanatoria with their several hundred patients need much more service than they have. One has some ancillary personnel at the present time, a full-time occupational therapist employed by the State Department of Health (salary is supplemented by funds from local tuberculosis associations), and a rehabilitation counselor provided by the State tuberculosis society. The other two sanatoria have limited counseling service from the official rehabilitation agency.

The health department clinics, Central Cooperative Clinic, and the private clinics have none of these services.

Possible reasons for the variations in the availability of ancillary personnel in the general hospitals are (1) in some there were an insufficient number of tuberculosis patients and these were hospitalized temporarily for surgery or pending early transfer elsewhere; (2) some rehabilitation agencies did not want their personnel to face the dangers of exposure to an infectious disease; (3) the physicians were not wholly in sympathy with the idea; or (4) there were insufficient funds and staff to give as much service as was needed generally and the tuberculosis patients suffered like the others. The last two points could also explain the lack or inadequacy of these services in the tuberculosis sanatoria. The methods for remedying this situation

<sup>7</sup> As of January 1, 1950, a complete occupational therapy department is to be developed in the Philadelphia General Hospital. This project was under consideration for 2 years. The tuberculosis department of the hospital will have a full-time occupational therapist provided by funds from the Philadelphia Tuberculosis and Health Association.

require careful consideration since they involve serious limitations of funds and/or lack of interest on the part of responsible persons.<sup>8</sup>

The Bureau of Rehabilitation is the principal resource for vocational rehabilitation in the community. The Bureau is not able to render a complete service because of insufficient funds at its disposal. Because of this there are limitations to the Bureau's services in terms of numbers and types of patients, allowances for tuition, and maintenance and kind of training. The use of a means test as an eligibility requirement also restricts the service given.<sup>9</sup>

The other agencies offering rehabilitation services (with the exception of the Veterans' Administration Vocational Rehabilitation and Education Division) find themselves in the reverse position, that of insufficient referrals. For the past several years very few tuberculosis cases have been referred to these agencies. One explanation given by an agency director was that tuberculosis patients are reluctant to accept referrals for occupational therapy and rehabilitation counseling, because of emotional reactions to the disease. In some instances, patients are anxious to go to work immediately and earn money after a long period of dependency; in others there is the tendency to prolong convalescence as long as possible because of the frequently encountered fear of breakdown. There is unquestionably some significance to these points, but there may be other factors operating which warrant consideration. With the exception of one agency which questioned its usefulness for tuberculosis patients because of the danger of exposure to dust (the work provided was largely renovation of discarded articles), all the executives are willing to have these referrals if the patient's disease is arrested or noninfectious. An additional possible explanation, in the writer's opinion, is that the inadequacy of medical social services in the local clinics, hospitals, and sanatoria probably results in insufficient planning and evaluation of the patient's needs during hospitalization and after discharge.

Any attempt to determine the extent to which the rehabilitation needs of tuberculosis patients are being met must be largely hypothetical, as there are no standards on which to base any estimate of the number of tuberculous patients needing vocational rehabilitation. Estimates have varied from 10 to 33½ percent of the total case load. It has been reported that there are about 6,500 known active and questionably active tuberculosis cases at home in Philadelphia. Figures are not available, but it is estimated that approximately 250 are receiving rehabilitation service.

<sup>8</sup> A 10-year study of the rehabilitation of the tuberculous was completed in July 1949. Through demonstration and research the need for counselors and other services was brought out.

<sup>9</sup> Since the material for this study was gathered the situation has changed. The Bureau is now able to handle all the referrals it receives. Funds are adequate for tuition, maintenance, and other services. The means test has been liberalized so that more people are eligible for services.

## Method of Study

The following resources were studied:<sup>10</sup>

### MEDICAL AND PUBLIC HEALTH AGENCIES

#### *Official Health Agencies*

Health Department. Tuberculosis Control Division; Clinics; Philadelphia General Hospital; Philadelphia Hospital for Contagious Diseases; Central Co-operative Clinic of Temple University.

U. S. Naval Hospital.

State Sanatoria.

#### *Nonofficial Health Agencies*

Hospital of the University of Pennsylvania; Pennsylvania Hospital; Graduate Hospital; Children's Hospital of Philadelphia; Hahnemann Hospital; All Saints Hospital; Eagleville Sanatorium; Rush Hospital for Consumption; Barton Memorial Division of the Jefferson Hospital.

#### *Voluntary Health Agency*

Philadelphia Tuberculosis and Health Association.

### SOCIAL AGENCIES

#### *Official*

Department of Public Welfare; Philadelphia County Board of Assistance; Veterans' Administration.

#### *Nonofficial*

The Philadelphia Protestant Episcopal City Mission; Family Society of Philadelphia; Jewish Family Service of Philadelphia; Association for Jewish Children of Philadelphia; Bureau for Colored Children; The Catholic Children's Bureau; Children's Aid Society of Pennsylvania; The House of the Holy Child (now Children's Services, Inc.); Society for the Prevention of Cruelty to Children; American Red Cross; Travelers' Aid Society of Philadelphia.

### REHABILITATION AGENCIES

#### *Official*

State Board of Vocational Education:

Bureau of Rehabilitation.

Homebound Service.

Veterans' Administration Vocational Rehabilitation and Education Division.

School District of Philadelphia, Board of Education Medical Service:

Division of Vocational Education.

Division of Pupil Personnel and Counseling.

#### *Nonofficial*

Philadelphia School of Occupational Therapy; Curative Workshop; Visiting Nurse Society of Philadelphia Occupational Therapy Department; Rehabilitation Committee of the Health and Welfare Council, Information and Advisory Service for the Handicapped; Shut-In Society, Pennsylvania Branch; Philadelphia Society for Crippled Children and Adults, Inc.; Good-Will Industries.

<sup>10</sup> Several other organizations were not actually visited and thoroughly studied, but information was secured by letter or other means. They contributed to some extent to the total picture.



Most of the foregoing information was gathered from interviews with staff members of the agencies listed above. Conferences were held with State and local tuberculosis control officers and others who are in a position to give information or make recommendations.

Background material was gained from published and unpublished reports, articles, theses, and various other studies. Schedules were used for recording the information gained in interviews (pp. 303-305). Summaries of this material were submitted for approval to the agency executives. Some parts of the report were also submitted for comment to the appropriate organizations: National Tuberculosis Association, Veterans' Administration, and the Office of Vocational Rehabilitation. Tentative findings and recommendations were discussed with members of an advisory committee composed of professional persons representing the major social work fields of the study. These committee members were:

Chairman: Frances N. Harrison, Executive Director, Federation of Jewish Charities, 1511 Walnut Street, Philadelphia.

Sophie Averbach, Medical Social Worker, Central Cooperative Clinic, Temple University Medical School, Philadelphia.

Merrill L. Dawson, Rehabilitation Consultant, Pennsylvania Tuberculosis Society, 311 South Juniper Street, Philadelphia.

Muriel Gayford, Lecturer in Medical Social Work, Department of Social Economy and Social Research, Bryn Mawr College, Bryn Mawr, Pa.

Wayne Hopkins, Executive Secretary, Armstrong Association, 1434 Lombard Avenue, Philadelphia.

Holland Hudson, Director, Rehabilitation Service, National Tuberculosis Association, 1790 Broadway, New York 19, N. Y.

Adaline Johnesse, Psychiatric Social Work Consultant, Office of Vocational Rehabilitation, Federal Security Agency, Washington 25, D. C.

C. Marion Kohn, Consultant on the Visually Handicapped, Philadelphia County Board of Assistance, 112 North Broad Street, Philadelphia.

Elizabeth Kurtz, Executive Secretary, Cerebral Palsy Society, 8 South Fifteenth Street, Philadelphia.

Gertrude K. Langton, Executive Secretary, Association of Tuberculosis Clinics, Philadelphia Tuberculosis and Health Association, 311 South Juniper Street, Philadelphia.

Margaret Nix, Executive Secretary, Family Division, Health and Welfare Council, Room 1000, 311 South Juniper Street, Philadelphia.

Ralph Ormsby, Executive Director, Family Society of Philadelphia, 311 South Juniper Street, Philadelphia.

Mary L. Poole, Director, Department of Social Service, University of Pennsylvania Hospitals, Philadelphia.

Ivan Shrader, Rehabilitation Counselor, Board of Vocational Education, Bureau of Rehabilitation, 1207 Chestnut Street, Philadelphia.

\* \* \*

The writer appreciates the cooperation of the persons who participated in this study. Information was given freely and with expressions of keen interest. There was frank admission of shortcomings and limitations in services. The most critical and searching self-

evaluation was done by the agency executives and staff members who are apparently providing the more adequate services. Any shortcomings in the local social resources are not due to lack of vision among the administrators.

#### SCHEDULE FOR MEDICAL SOCIAL SERVICE <sup>11</sup>

##### *Institution*

1. Name.
2. Location.
3. Type: Whether separate clinic, hospital only, hospital with out-patient department; private, public, general, or special for tuberculosis.
4. Size: Bed capacity or daily average clinic visits for general cases and for tuberculosis.
5. Medical services: Clinic, diagnostic only, ambulant pneumothorax; hospital, bed-rest, pneumothorax, other surgery.
6. Admission requirements or limitations: Residence, racial, age, stage of disease, other.
7. Nonmedical staff (on TB service): Number of each and whether full time or part time: Medical and/or psychiatric social workers, occupational therapists, rehabilitation workers, librarians, teachers, others.
8. Administration: Board or department responsible. Name of director.

##### *Social Service Department*

1. Organization: Under whose jurisdiction does it operate? Job titles of workers and number of each. Number of separate workers for tuberculosis service.
2. Personnel: Name of director. Name, professional qualifications and length of employment in medical social work of each of the workers assigned to tuberculosis service. Length of time in this institution and in this assignment. Who appoints staff? Is there a merit system? Standards of employment. Does director consider staff adequate (professional and clerical)? Are personnel standards good? Is physical set-up adequate?
3. Finances: Is department financed through hospital budget, private funds or otherwise? Are salaries, supplies, aid to patients for nonmedical needs included in budget? Is budget adequate?
4. General functions: Discuss each. Admitting, case-work service (basis of selection of cases—100 percent review, referral of individual patients, new admissions routinely, hospital discharges routinely; average monthly tuberculosis case load, number patients served last year, is service extended to family and contacts?), consultation, recreation, supervision (are there students in training from a school of social work?), teaching (of medical students, internes, student nurses, student dietitians, others), and miscellaneous (such as follow-up of patients either routinely or on selected basis, determination of eligibility for medical care or other medical needs, clinic management).
5. Major problems encountered: Discharges against advice, disciplinary discharge, financial, family, other.
6. Procedures: Are summarized social service records included in medical charts? What other recording methods are used? Are medical social summaries sent to cooperating agencies? Use of Social Service Exchange. Are monthly and/or annual reports submitted, and to whom? Does social worker attend (1)

<sup>11</sup> These schedules are condensed versions of those used as guides for the interviews with agency staff members. The originals provided adequate space under each heading for recording the information secured.

social service staff meetings, (2) ward rounds, (3) medical staff conferences, (4) rehabilitation conferences?

7. General: Is psychiatrist available for consultation and/or treatment? Rate according to scale of excellent, good, fair, poor, the following: relationships with medical staff, other staff, health department, local social agencies. Has the worker on the tuberculosis service done any research either in collaboration or independently? Has it been published? Worker's and director's opinion of the efficacy of the service provided? What improvements do they suggest?

### SCHEDULE FOR SOCIAL AGENCY

#### *Description of Agency*

1. Name of agency: Names and titles of persons interviewed; name and title of director.

2. Type of agency: Family service, child welfare, veterans, public assistance, generalized.

3. Auspices: Private nonsectarian, sectarian; public-State, county, city.

4. Source of support.

5. Staff composition: Number and percent with full professional training—case workers, medical social consultants, physicians, nurses, psychiatrists, dietitians, psychologists, other special and nonadministrative or clerical personnel. List titles or responsibilities for "others."

6. Major services: Does your agency include any of the following provisions in its services—medical relief, psychiatric consultation (to staff, to patients), house-keeping, convalescent care, psychiatric treatment.

7. Policies: Are eligibility requirements for service stipulated by law; by policy? Are tuberculosis patients included in case load? If by special provision, describe. If excluded, indicate reason. Are any of the following factors requirements for service—legal residence, citizenship, race or religion, age, geographical location, finances.

#### *Services to Tuberculosis Patients*

1. Number of patients served currently? Total case load? Is this number more or less than usual?

2. What special consideration, if any, is given to tuberculosis patients; e. g., liberalization of intake policies, early appointments for applications, additional grants for relief, special case load for social workers, other.

3. Procedures followed in providing service. Orientation of case work staff to special problems of the tuberculous. Describe method; e. g., institutes, medical social consultation, staff meetings, reading material, visits to tuberculosis institutions. Do social workers visit their clients who are patients in tuberculosis hospitals or sanatoria? Are social summaries exchanged between agency workers and medical social workers in tuberculosis hospitals? What methods are used to obtain medical reports on tuberculosis patients? What responsibility is assumed for having contacts examined? Does this agency provide necessary supplementation of public assistance? If so, on what basis? Is any financial aid provided by this agency for: patients' medical needs, payments for medical care, purchase of appliances, streptomycin, other special medications, allowances for patients in hospitals, clothing for patients in hospitals, transportation. Have any research projects relating to tuberculosis been done in this agency?

General comments on the adequacy of services this agency is able to provide to tuberculous patients.

Comments on unmet needs in the community as seen by this agency representative.

## SCHEDULE FOR REHABILITATION AGENCY

### *Description of Agency*

1. Name of agency: Names and titles of persons interviewed.
2. Type: Medical, rehabilitation, educational.
3. Auspices: Public, private.
4. Administration: Board, title and professional training of administrator.
5. Staff composition: Number of each; whether full or part time and professional qualifications—physicians, psychiatrists, teachers, psychologists, nurses, rehabilitation counselors, social workers, librarians, occupational therapists, recreation workers, lay volunteers. Major functions of each staff member. Do patients or ex-patients assist?
6. Funds, physical plant, equipment, clerical assistance. Comment on adequacy of each.

### *Types of Rehabilitation Services*

1. Vocational rehabilitation: Testing, counseling or guidance, training (tuition, supplies, maintenance), placement, follow-up, special medical or psychiatric treatment, appliances or other medical relief.
2. Occupational therapy: Individual diversional, prevocational testing, prevocational training, home-bound service, group recreational, group meetings, patient publications.
3. Teaching or training: Academic, vocational.
4. Library service: Unsupervised distribution of books, bibliotherapy.
5. Are any other services provided for the tuberculous?

### *Policies Governing Availability of Services*

1. Are pulmonary tuberculosis patients accepted? If so, at what stage in patient's disease? Is medical recommendation required, including stipulation of hours of activity patient can safely undertake? Who may refer patients: Physicians, nurses, social agencies, medical social workers, others? Is there an established pattern for referral, e. g., when patient reaches a certain diagnostic stage or activity tolerance level? Are there legal or administrative requirements or limitations regarding residence, age, race, sex, finances? Number of persons given various services during past year?

### *Procedures*

1. Case conferences: Regularity, frequency, who attends, type of cases discussed, is the patient present?
  2. Methods of coordination with other agencies: Exchange of written reports, formal and/or informal discussions, recording (separate and/or in medical charts). Describe discharge planning and post-discharge follow-up. Are cases cleared with Social Service Exchange? Who provides case-work service when indicated?
  3. Criteria for closing cases.
- Agency worker's evaluation of program, need for and current plans for expansion or improvement both in the agency and in the community.

## QUESTIONNAIRE FOR HOSPITALS AND CLINICS

(Hospitals and clinics providing care for tuberculous patients which were not visited by the investigator were asked to complete the questionnaire and return it by mail)

1. Number of tuberculosis patients under care as of this date \_\_\_\_\_
2. Is this figure average \_\_\_\_\_, higher \_\_\_\_\_, lower \_\_\_\_\_, than usual?  
If either higher or lower, what amount of difference is there? \_\_\_\_\_
3. What is the financial status of these patients? Private or full-pay \_\_\_\_\_  
Part-pay \_\_\_\_\_ Free \_\_\_\_\_ (Please indicate proportion of each).

March 3, 1950

4. Who in your hospital (title) is responsible for:
  - a. Admitting interview .....
  - b. Financial investigations .....
  - c. Financial adjustments .....
  - d. Diversional therapy or recreation .....
  - e. Occupational therapy .....
  - f. Vocational rehabilitation .....
  - g. Follow-up .....
5. Please check the social problems most frequently presented by tuberculosis patients at your hospital or clinic and indicate the person who handles them:
  - a. Emotional states related to diagnosis or medical care .....
  - b. Child placement .....
  - c. Housekeeping service .....
  - d. Housing or other environmental problems .....
  - e. Family relationships .....
  - f. Transfer to other medical facilities .....
  - g. Discharge against medical advice .....
  - h. Others (Specify) .....
6. Are referrals of the above problems to social agencies handled by any one person? Yes ..... No .....  
 If yes, please specify person .....  
 Title .....
7. Which agencies are most often utilized in these situations .....  
 Please list .....  
 Have any difficulties arisen in getting care for your patients from community resources? Yes ..... No .....  
 Please comment .....
8. General comments .....

(Signature of person filling out form)

.....  
 Name

.....  
 Title

## Erratum

The author footnote referring to Louis S. Reed, Ph. D., coauthor of the article "Tuberculosis Facilities and Planning Under the Hospital Survey and Construction Act," published in the February 3 issue, was incorrectly stated. Dr. Reed is Chief, Medical Economics Branch, Division of Medical and Hospital Resources, Bureau of Medical Services.



# INCIDENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### REPORTS FROM STATES FOR WEEK ENDED FEBRUARY 11, 1950

Most diseases reported for the current week in the United States showed little change when compared with the preceding week and the corresponding week last year. Reported cases of influenza, measles, and whooping cough show larger increases over last week than did certain other diseases. However, the increase in influenza incidence is almost entirely confined to Texas (from 3,114 to 4,796) and Virginia (from 854 to 1,274). For the corresponding week last year Texas reported 2,612 cases and Virginia reported 431 cases. For the current week, Oklahoma reported a total of 230 cases as compared with 117 last week. The median for Oklahoma is 157 reported cases of influenza.

For the United States, 33,417 cases of influenza were reported for the first 6 weeks of 1950 as compared with 27,416 cases reported for the corresponding period of 1949. The 5-year (1945-49) cumulative median is 27,416. For the first 6 weeks of 1950, Texas reported a total of 18,500 cases of influenza as compared with 14,746 for the corresponding period last year, and Virginia reported a total of 4,761 cases for 1950 as compared with 2,619 for the same period last year.

Reported cases of measles while higher for the current week (6,564) as compared with the previous week (6,230) are below the corresponding week (20,322) of last year and the median (11,260). Reported cases of whooping cough increased from 2,570 to 2,881.

The text table below gives the number of cases of influenza reported by geographic division for each of the first 6 weeks in the current calendar year.

	Jan. 7	Jan. 14	Jan. 21	Jan. 28	Feb. 4	Feb. 11
United States-----	4, 077	4, 325	4, 563	6, 512	5, 973	7, 967
New England-----	1	1	1	-----	-----	8
Middle Atlantic-----	4	5	1	3	7	2
East North Central-----	35	22	48	21	244	98
West North Central-----	19	43	58	7	45	32
South Atlantic-----	808	784	959	2, 632	1, 292	1, 731
East South Central-----	238	262	153	433	700	514
West South Central-----	2, 653	2, 954	2, 948	3, 144	3, 382	5, 238
Mountain-----	293	231	379	221	241	312
Pacific-----	26	23	16	51	62	32
March 3, 1950						307

**Telegraphic case reports from State health officers for week ended February 11, 1950**

[Leaders indicate that no cases were reported]

Division and State	Diphtheria	Etiophthalmia, infectious	Influenza	Measles	Menigitis, meningococcal	Pneumonia	Polio-myelitis	Rocky Mt. spotted fever	Scarlet fever	Small-pox	Tularemia	Typhoid and paratyphoid fever	Whooping cough	Rabies in animals
<b>NEW ENGLAND</b>														
Maine.....				55		11			15			1	16	
New Hampshire.....			1	4		2			4				41	
Vermont.....				110	1				120			2	152	
Massachusetts.....	5					6			10				25	
Rhode Island.....	1			67	2	60	1		25				108	
Connecticut.....			7											
<b>MIDDLE ATLANTIC</b>														
New York.....	5	3	2	545	5	262	4		3163			2	207	18
New Jersey.....	1	2		371		67	2		23			10	175	2
Pennsylvania.....	2			186	9	66	2		121		1	3	303	
<b>EAST NORTH CENTRAL</b>														
Ohio.....	10		1	201	10	34	2		201			1	164	7
Indiana.....	5			47		12			50			2	24	12
Illinois.....	1		50	142	1	82	4		78			1	97	1
Michigan.....	3	2		1,633	1	40	1		181		1	1	246	2
Wisconsin.....	1	1	47	190	1	14			82			1	196	
<b>WEST NORTH CENTRAL</b>														
Minnesota.....				70		6			27				27	
Iowa.....			1	732	1	1	8		11				2	6
Missouri.....	2		1	18	4	43	1		23			1	17	
North Dakota.....	1		2			20					3			
South Dakota.....	1			22	1				15				1	
Nebraska.....			9	137		1			7				3	
Kansas.....	1		19	5		15	1		24	1		3	10	1
<b>SOUTH ATLANTIC</b>														
Delaware.....				33					4				12	
Maryland.....		1	3	45		30	1		28				79	
District of Columbia.....				83	1	23			3				4	
Virginia.....	4			35	8	103			35				18	3
West Virginia.....	3		1,274	125	5	5			9				36	6
North Carolina.....	9		78	125	3		2		29			2	63	7
South Carolina.....	4		64	112	2	14			4				3	10
Georgia.....	1		312	31		29	4		18				2	
Florida.....	3			36		14	7		6				6	

Virginia  
West Virginia  
North Carolina  
South Carolina  
Georgia  
Florida

125  
125  
112  
31  
30

47  
78  
64  
312  
30

1  
3  
2  
2  
14

2  
2  
4  
7  
14

29  
4  
18  
6  
6

2  
2  
1  
1  
1

7  
7  
3  
3  
6  
6

EAST SOUTH CENTRAL

Kentucky  
Tennessee  
Alabama  
Mississippi

12  
7  
2  
16

32  
96  
67  
46

7  
178  
369  
20

1  
7  
1  
1

27  
80  
48

4  
4

60  
11  
17  
10

1  
2  
2

61  
61  
11  
1

27  
5  
8  
10

WEST SOUTH CENTRAL

Arkansas  
Louisiana  
Oklahoma  
Texas

3  
8  
4  
23

212  
34  
13  
161

1  
59  
63  
4  
17  
798

3  
6  
1  
30

8  
6  
17  
57

2  
2  
2  
4

65  
11  
22  
220

11  
5  
32

MOUNTAIN

Montana  
Idaho  
Wyoming  
Colorado  
New Mexico

2  
1  
1  
1  
2

25  
26  
14  
45  
10

1  
12  
8  
68  
9  
25  
11

6  
6  
1  
2  
3  
2

12  
8  
12  
12  
36  
3  
2

1  
1  
1  
1  
1  
3  
3

4  
11  
17  
78  
32

8  
8  
1  
1

PACIFIC

Washington  
Oregon  
California

3  
4  
5

147  
14  
187

3  
33  
63

2  
2  
13

79  
17  
138

1  
1  
8

71  
29  
110

2  
2  
2

Total  
Median, 1945-49  
Year to date 6 weeks  
Median, 1945-49

154  
299  
1,053  
1,878

7,967  
4,965  
33,417  
27,416

94  
166  
529  
520

120  
48  
704  
280

1,871  
2,748  
9,971  
15,892

23  
18  
146  
168

51  
41  
4208  
248

2,881  
1,921  
14,350  
13,648

184  
845

Seasonal low week ends  
Since seasonal low week  
Median, 1944-45 to 1948-49

(27th)  
July 9  
5,324  
9,444

(30th)  
July 30  
63,947  
63,686

(37th)  
Sept. 17  
1,442  
1,488

(11th)  
Mar. 19  
42,186  
19,255

(32d)  
Aug. 13  
26,410  
41,725

(35th)  
Sept. 3  
416  
77

(11th)  
Mar. 19  
43,641  
3,782

(39th)  
Oct. 1  
35,886  
36,943

† Including cases reported as salmonella. Cumulative and median figures changed to include salmonella.

‡ New York City only.

§ Including cases reported as streptococcal sore throat.

• Deductions: Smallpox, New Mexico, 1 case for week ended Jan. 21; typhoid fever, Georgia, 1 case week ended Feb. 4.

Alaska: No cases reported.

Hawaii: Influenza, 30 cases.

## TERRITORIES AND POSSESSIONS

### Virgin Islands

*Notifiable diseases—October–December 1949.*—During the months of October, November, and December 1949, cases of certain notifiable diseases were reported in the Virgin Islands as follows:

Disease	October	November	December
Ascariasis.....	1	1	1
Cancer.....			1
Chickenpox.....	1		
Hookworm disease.....	1	1	
Filariasis.....	1		1
Gonorrhea.....	14	15	6
Meningitis, meningococcal.....			1
Schistosomiasis.....	1		1
Strongyloides.....			3
Syphilis.....	28	8	27
Trichuriasis.....	19	18	5
Tuberculosis, pulmonary.....	1	1	1
Whooping cough.....		3	12

## FOREIGN REPORTS

### CANADA

*Provinces—Notifiable diseases—Week ended January 21, 1950.*—During the week ended January 21, 1950, cases of certain notifiable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox.....			31		330	406	39	50	62	129	1,047
Diphtheria.....			4		8	4			1		17
Dysentery, bacillary.....						2				3	5
German measles.....			3		7	105		26	209	42	392
Influenza.....			33			2	4				39
Measles.....			55	6	371	406	32	98	75	156	1,190
Meningitis, meningococcal.....			1			1	2			1	5
Mumps.....			75		170	613	8	39	55	258	1,218
Poliomyelitis.....					1					1	2
Scarlet fever.....	5		6	3	76	50	6	8	87	8	249
Tuberculosis (all forms).....	7		2	10	88	36	16	11	21	26	217
Typhoid and paratyphoid fever.....					10	1				2	13
Undulant fever.....						1					1
Venereal diseases:											
Gonorrhea.....	5		3	10	(1)	79	25	19	28	76	1245
Syphilis.....	2		7	3	(1)	41	2	6	4	9	174
Whooping cough.....	3		14		77	61	3	2	3	14	177

<sup>1</sup> Report not received from the Province of Quebec.

## CHILE

*Santiago—Poliomyelitis.*—During the recent outbreak of poliomyelitis in Santiago, Chile, 85 cases, 14 deaths, were reported in Santiago Province for the month of December 1949. For the period January 1-14, 1950, 43 cases, with 6 deaths, were reported in Santiago City, and information dated February 7, 1950, stated that 32 cases with 9 deaths occurred in that city during the period January 15-28, 1950.

## FINLAND

*Notifiable diseases—November 1949.*—During the month of November 1949, cases of certain notifiable diseases were reported in Finland as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis.....	9	Paratyphoid fever.....	123
Diphtheria.....	89	Poliomyelitis.....	19
Dysentery.....	111	Scarlet fever.....	544
Gonorrhea.....	649	Syphilis.....	63
Malaria.....	1	Typhoid fever.....	31

## MADAGASCAR

*Notifiable diseases—December 1949.*—Notifiable diseases were reported in Madagascar and Comoro Islands during December 1949 as follows:

Disease	Aliens		Natives	
	Cases	Deaths	Cases	Deaths
Bilharziasis.....			36	5
Cerebrospinal meningitis.....			7	4
Diphtheria.....			7	
Dysentery:				
Amoebic.....	9		347	3
Bacillary.....			170	35
Erysipelas.....			12	1
Influenza.....	39		1,753	26
Leprosy.....			28	
Malaria.....	235	3	30,350	178
Measles.....			182	
Mumps.....			65	
Plague.....			5	5
Pneumonia, broncho.....	3	1	281	54
Pneumonia, pneumococci.....	1		270	32
Puerperal infection.....			5	1
Relapsing fever.....	1			
Tuberculosis, pulmonary.....	7		82	12
Typhoid fever.....			14	3
Whooping cough.....			329	10



## NEW ZEALAND

*Notifiable diseases—5 weeks ended December 31, 1949.*—Certain notifiable diseases were reported in New Zealand as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Cerebrospinal meningitis.....	14	1	Influenza.....	3	-----
Diphtheria.....	10	1	Poliomyelitis.....	16	-----
Dysentery:			Puerperal fever.....	5	-----
Amebic.....	7	-----	Scarlet fever.....	99	-----
Bacillary.....	6	-----	Tetanus.....	1	-----
Erysipelas.....	12	-----	Tuberculosis (all forms).....	192	52
Food poisoning.....	6	-----	Typhoid fever.....	15	1
Hookworm disease.....	1	-----			

## NORWAY

*Notifiable diseases—November 1949.*—During the month of November 1949, cases of certain notifiable diseases were reported in Norway as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis.....	7	Mumps.....	153
Diphtheria.....	33	Paratyphoid fever.....	2
Encephalitis, epidemic.....	4	Pneumonia (all forms).....	3,386
Erysipelas.....	387	Poliomyelitis.....	12
Gastroenteritis.....	2,307	Rheumatic fever.....	111
Gonorrhea.....	233	Scabies.....	1,887
Hepatitis, epidemic.....	110	Scarlet fever.....	388
Impetigo contagiosa.....	2,509	Syphilis.....	68
Influenza.....	3,189	Tuberculosis (all forms).....	321
Laryngitis.....	13,150	Typhoid fever.....	4
Malaria.....	38	Whooping cough.....	4,650
Measles.....	1,375		

## REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

*Note.*—The following reports include only items of unusual incidence or of special interest and the occurrence of these diseases, except yellow fever, in localities which had not recently reported cases. All reports of yellow fever are published currently.

A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

### Plague

*China—Chahar Province.*—Information as to the occurrence of plague in Chahar Province, China, during the year 1949, states that the outbreak started in July and ended in November. A total of 69 cases with 66 deaths was reported in 10 villages. The disease appeared first in bubonic form, but later became pneumonic. No new cases were reported after November 15.

*India—Cawnpore.*—During the week ended January 28, 1950, two cases of plague (one fatal), were reported in Cawnpore, India.

*Pakistan—Karachi.*—During the week ended January 21, 1950, one fatal case of plague was reported in Karachi, Pakistan.

*Siam (Thailand).*—During the week ended January 21, 1950, five cases of plague, with two deaths, were reported in Siam.

#### Smallpox

*Arabia—Jedda and Mecca.*—During the week ended January 28, 1950, 16 cases of smallpox with 4 deaths were reported in Jedda, Arabia, and 11 cases 5 deaths in Mecca.

*Burma.*—For the week ended January 28, 1950, 262 cases of smallpox with 65 deaths were reported in Burma, including 151 cases 32 deaths in Bassein, and 71 cases 19 deaths in Rangoon. During the preceding week (week ended January 21, 1950), 134 cases with 43 deaths were reported in Bassein and 72 cases with 21 deaths in Rangoon.

*China—Sung Shan.*—During the period December 21–31, 1949, 34 cases of smallpox with 4 deaths were reported in Sung Shan, China.

*India.*—During the week ended January 28, 1950, smallpox was reported in cities in India as follows: Calcutta 208 cases, 94 deaths; New Dehli 46 cases, 27 deaths; Cawnpore 32 cases, 14 deaths; Mangalore 24 cases, 2 deaths.

*Sierra Leone.*—During the week ended December 3, 1950, 25 cases of smallpox were reported in Sierra Leone.

*Union of South Africa.*—During the month of September 1949, 142 cases of smallpox with 11 deaths were reported in Union of South Africa, of which 113 cases 4 deaths occurred in Transvaal; for the month of October 204 cases, 10 deaths were reported in the Union, including 196 cases, 10 deaths in Transvaal.

#### Typhus Fever

*Spain—Madrid.*—During the week ended December 31, 1949, 6 cases of typhus fever were reported in the Consular District of Madrid, Spain.

### DEATHS DURING WEEK ENDED FEB. 11, 1950

	Week ended Feb. 11, 1950	Corresponding week, 1949
Data for 93 large cities of the United States:		
Total deaths.....	9,754	10,023
Median for 3 prior years.....	10,026	
Total deaths, first 6 weeks of year.....	57,976	59,864
Deaths under 1 year of age.....	626	672
Median for 3 prior years.....	677	
Deaths under 1 year of age, first 6 weeks of year.....	3,777	4,148
Data from industrial insurance companies:		
Policies in force.....	69,861,835	70,621,674
Number of death claims.....	13,123	13,755
Death claims per 1,000 policies in force, annual rate.....	9.8	10.2
Death claims per 1,000 policies, first 6 weeks of year, annual rate.....	10.1	9.8

March 3, 1950

---

### **Examination for Dental Officers**

Examinations for dental officers in the Regular Commissioned Corps of the Public Health Service will be held April 17-19 in various cities throughout the country. Completed applications must be in the Washington office by March 20.

Appointments are permanent and provide opportunities for career service in clinical, research, and public health dentistry. Benefits include periodic pay raises and promotions; liberal retirement provision; medical care; annual and sick leave.

Appointments will be made in the grades of assistant and senior assistant dental surgeon, equivalent to Army ranks of 1st lieutenant and captain, respectively. Entrance pay is \$5,686 for assistant and \$6,546 for senior assistant (with dependents), including the \$1,200 additional pay received by dental officers and rental and subsistence allowance. Applicants must be citizens and graduates of an approved school of dentistry.

The written professional examination will include oral surgery, oral medicine, oral pathology and bacteriology, anatomy, pathology and bacteriology (general), physiology, pharmacology, operative dentistry, prosthetic dentistry, dental materials, periodontia, roentgenology, public health, and pedodontia.

For application forms and additional information write to: Surgeon General, Public Health Service, Federal Security Agency, Washington 25, D. C. Attention: Division of Commissioned Officers.

---

×

♦ ♦ ♦

The printing of this publication has been approved by the Director of the Bureau of the Budget (August 10, 1949).

The PUBLIC HEALTH REPORTS, first published in 1878 under authority of an act of Congress of April 29 of that year, is issued weekly by the Public Health Service through the Division of Public Health Methods, pursuant to the following authority of law: United States Code, title 42, sections 241, 245, 247; title 44, section 220.

It contains (1) current information regarding the incidence and geographic distribution of communicable diseases in the United States, insofar as data are obtainable, and of cholera, plague, smallpox, typhus fever, yellow fever, and other important communicable diseases throughout the world; (2) articles relating to the cause, prevention, and control of disease; (3) other pertinent information regarding sanitation and the conservation of the public health.

The PUBLIC HEALTH REPORTS is published primarily for distribution, in accordance with the law, to health officers, members of boards or departments of health, and other persons directly or indirectly engaged in public health work. Articles of special interest are issued as reprints or as supplements, in which forms they are made available for more economical and general distribution.

Requests for and communications regarding the PUBLIC HEALTH REPORTS, reprints, or supplements should be addressed to the Surgeon General, Public Health Service, Washington 25, D. C. Subscribers should remit direct to the Superintendent of Documents, Washington 25, D. C.

Librarians and others should preserve their copies for binding, as the Public Health Service is unable to supply the general demand for bound copies. Indexes will be supplied upon request.

♦ ♦ ♦

UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON, D. C. : 1950

---

For sale by the Superintendent of Documents, United States Government Printing Office, Washington 25, D. C. Price 10 cents. Subscription price \$4.00 a year.